

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Presently Amended) A method of forming an X-ray layer image of an object with ~~[(9) to be examined by means of]~~ an X-ray device having ~~[which includes]~~ an X-ray source ~~[(2)]~~ and an X-ray detector ~~[(3)]~~, comprising the steps of:

displacing the X-ray source ~~[(2)]~~ and the X-ray detector ~~[(3) being displaced]~~ in an angular range ~~[(14)]~~ around the object ~~[(9) to be examined]~~ in order to acquire X-ray projection images ~~[from different directions, characterized in that the]; and~~ forming an X-ray layer image ~~[is formed]~~ directly from the X-ray projection images without creating an intermediary three-dimensional data set, the formed X-ray layer image being situated in a plane which extends essentially perpendicularly to a ~~[the]~~ bisector ~~[(20)]~~ of the angular range ~~[(14)]~~;

wherein ~~[and that]~~ the angular range of displacement is ~~[(14) amounts to]~~ less than 180°.

2. (Presently Amended) The ~~[A]~~ method as claimed in claim 1, wherein ~~[characterized in that]~~ the position of the angular range ~~[(14)]~~ relative to the object ~~[(9) to be examined]~~ can be changed.

3. (Presently Amended) The ~~[A]~~ method as claimed in claim 1, wherein ~~[characterized in that]~~ the angular range ~~[(14)]~~ lies between 90° and 180°.

4. (Presently Amended) The ~~[A]~~ method as claimed in claim 1, wherein ~~[characterized in that]~~ the angular range ~~[(14)]~~ is less than 90°.

5. (Presently Amended) The ~~[A]~~ method as claimed in claim 1, wherein ~~[characterized in that at the most]~~ 100 or less X-ray projection images are acquired in order to form ~~[for the formation of]~~ the X-ray layer image.

6. (Presently Amended) The [A] method as claimed in claim 1, wherein [~~characterized in that~~] no more than about 80 [~~that is, notably between 60 and 80,~~] X-ray projection images are acquired in order [~~so as~~] to form the X-ray layer image.

7. (Presently Amended) The [A] method as claimed in claim 1, wherein [~~characterized in that~~] a plurality of X-ray layer images of the object [~~(9) to be examined~~] which extend essentially parallel to one another are [~~is~~] formed from the acquired X-ray projection images.

8. (Presently Amended) The [A] method as claimed in claim 1, wherein [~~characterized in that~~] the X-ray projection images are acquired by means of a C-arm X-ray device.

9. (Presently Amended) The [A] method as claimed in claim 1, wherein [~~characterized in that~~] a plurality of X-ray layer images of neighboring thin layers are [~~is~~] combined in order [~~so as~~] to form an X-ray layer image of a thicker slice.

10. (Presently Amended) The [A] method as claimed in claim 1, wherein [~~characterized in that~~] the X-ray source [(2)] and the X-ray detector [(3)] are displaced along a circular trajectory around the object [~~(9) to be examined~~] in order to acquire X-ray projection images.

11. (Presently Amended) The [A] method as claimed in claim 1, wherein [~~characterized in that~~] the X-ray source [(2)] and the X-ray detector [(3)] are displaced in opposite directions in parallel planes in order to acquire X-ray projection images.

12. (Presently Amended) The [A] method as claimed in claim 11, wherein [~~characterized in that~~] only one of the X-ray source [(2)] or the X-ray detector [(3)] is displaced in order to acquire X-ray projection images.

13. (Presently Amended) An X-ray device~~[, notably an X-ray device for carrying out the method claimed in claim 1, including]~~ comprising:

an X-ray source ~~[(2) which can be displaced around an object (9) to be examined]~~ and an ~~[oppositely situated]~~ X-ray detector ~~[(3)]~~, each situated on an opposite side of an object being examined for the acquisition of X-ray projection images of the object [(9) to be examined], wherein at least one of the X-ray source and the X-ray detector are movable so that X-ray projection images are acquired in an angular range [(14)] around the object [(9) to be examined, which device includes];

an image processing unit ~~[(18)]~~ for forming an X-ray layer image from the X-ray projection images; and ~~[also]~~

a control unit ~~[(17)]~~ for controlling the X-ray device~~[, characterized in that];~~

wherein ~~[the control unit (17) is constructed in such a manner that]~~ only X-ray projection images in [from] an angular range [(14)] of less than 180° are acquired in order to form [for the formation of] the X-ray layer image[.]; and

wherein ~~[that]~~ the image processing unit forms [(18) is constructed in such a manner that] the X-ray layer image [is formed] directly from the X-ray projection images without creating an intermediary three-dimensional data set, where the formed X-ray layer image is [being] situated in a plane which extends essentially perpendicularly to a [the] bisector [(20)] of the angular range [(14)].

14. (Presently Amended) The [An] X-ray device as claimed in claim 13, wherein ~~[characterized in that]~~ the X-ray device includes a C-arm system.

15. (New) The method as claimed in claim 1, wherein between about 60 and about 80 X-ray projection images are acquired in order to form the X-ray layer image.

16. (New) A method of forming an X-ray layer image of an object with an X-ray device having an X-ray source and an X-ray detector, comprising the steps of:

displacing the X-ray source and the X-ray detector over a less than 180° angular range around an object being examined in order to acquire less than 100 X-ray projection images; and

forming at least one X-ray layer image directly from the less than 100 X-ray projection images without creating an intermediary three-dimensional data set, the formed X-ray layer image being situated in a plane which extends essentially perpendicularly to a bisector of the angular range.

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